COMPLIANCE COMPONENT

DEFINITION	
Name	Data Element Naming Standard
Description	ISO 11179 - Information technology — Specification and standardization of data elements: Parts 1 through 6. This standard focuses on Part 5 regarding naming conventions. Traditionally, data element names have been short and somewhat cryptic, making them ambiguous and difficult to interpret. The ISO 11179 standard provides a precise, structured and consistent method for naming data elements.
Rationale	Much of the work being done in the IT industry regarding the creation of data element naming standards is based on ISO 11179. Ultimately, the goal is to create semantically precise and globally understood data element names. Data element definitions, then, should be written to facilitate understanding by anyone who uses the shared data. The ISO 11179 – Part 5 standard is a good starting point for this activity. This is especially important when sharing data.
Benefits	In addition to clear and precise data element names, it is also essential to write precise, unambiguous data element definitions. The ISO 11179 standard makes a case for this. "When two or more parties exchange data, it is essential that all are in explicit agreement of the meaning of that data. One of the primary vehicles for carrying a data's meaning is the data element definition." -- ISO 11179 Part 4 Some of the benefits include: • Standardize structure and contents of metadata registries • Make metadata collections accessible, searchable by semantic content • Support understanding and reuse of data standards • Promote use of standards for greater interoperability

ASSOCIATED ARCHITECTURE LEVELS	
Specify the Domain Name	Information
Specify the Discipline Name	Data Management
Specify the Technology Area Name	Enterprise Data Element Standards
Specify the Product Component Name	

COMPLIANCE COMPONENT TYPE	
Document the Compliance Component Type	Standard
Component Sub-type	

COMPLIANCE DETAIL	
State the Guideline, Standard or Legislation	ISO 11179 – Specification and Standardization of Data Elements
Document Source Reference #	ISO11179 – Specification and Standardization of Data Elements. The standard has six sections regarding the standards associated with the development of globalized data elements: These sections are: Part 1: Framework for the Spec & Stand of Data Elements Part 2: Classification for Data Elements Part 3: Basic Attributes of Data Elements

Part 4: Rules & Guidelines for Formulation of Data Definitions
Part 5: Naming and Identification Principles for Data Elements
Part 6: Registration of Data Elements

Rules for Registration Identification of Data Elements
1. Each data element shall have a unique identifier.
2. The component identifier shall provide unique identification of data element information for transfer outside the State Data Dictionary (TBD).
3. A data element shall have at least one name within a context.
4. To be assigned a component identifier in accordance with **ISO 11179**, a data element shall be:
   - Derived according to Part 2
   - Attributed according to Part 3
   - Defined according to Part 4
   - Named according to Part 5
   - Registered according to Part 6

Naming Schema
ISO 11179 has a naming scheme with three major components for naming data elements: an object class term, a property term, and representation term. A fourth part, -a qualifier term - may also be used. The general format should be ObjectPropertyRepresentation or ObjectQualifierPropertyRepresentation with each component capitalized and with no intervening spaces. Each of the components of a data element name is defined as follows:

Object Class Term
An object class represents the logical data grouping (in a logical data model) to which a data element belongs (ISO 11179). It is a set of objects that share a common structure and a common behavior. For example, in the data element "EmployeeAddressText," the component *Employee* is the object class term.

Qualifier Term
A word or words that help define and differentiate a name within the database. For example, in the data element "EmployeeMailingAddressText", the component *Mailing* is a qualifier term.

> **Note:** The Object Class Term and the Qualifier Term should be set and agreed upon by the Business Architecture community.

Property Term
Property represents the distinguishing characteristic of the business entity. For example, in the data element "EmployeeAddressText", the component *Address* is the property term.

Representation Term
The form of the set of valid values for a data element, e.g., "amount," "name." It shall be one of the terms specified in the "list of Representation Terms.**"** (See ISO 11179-Appendix A for a list of Representation Terms.) For example, in the data element "EmployeeAddressText", the component *Text* is the representation term.

> **Note:** The specific elements denoted by Property Term and Representation Term will be specified by the Information Domain – Data Management Discipline – Enterprise Data Element Standards.

Compliance Sources			
Name	ISO	*Website*	http://www.iso.org

Contact Information	International Organization for Standardization (ISO) – see website		
Name		Website	
Contact Information			

KEYWORDS

List Keywords	ISO, data element, naming, 11179, International Organization for Standardization, data management, standard, naming standard, object class term, property term, representation term, qualifier term

COMPONENT CLASSIFICATION

Provide the Classification	☐ Emerging	☒ Current	☐ Twilight	☐ Sunset
Sunset Date				

COMPONENT SUB-CLASSIFICATION

Sub-Classification	Date	Additional Sub-Classification Information	
☐ Technology Watch			
☐ Variance			
☐ Conditional Use			

Rationale for Component Classification

Document the Rationale for Component Classification	Target state necessary for interoperability and programmatic integration.

Migration Strategy

Document the Migration Strategy	

Impact Position Statement

Document the Position Statement on Impact	

CURRENT STATUS

Provide the Current Status	☐ In Development	☐ Under Review	☒ Approved	☐ Rejected

AUDIT TRAIL

Creation Date	11/15/04	Date Approved / Rejected	05/10/05
Reason for Rejection	2/8/05 Need to distinguish between which standards are actually being used.		
Last Date Reviewed		Last Date Updated	
Reason for Update			